

Ferrissia wautieri (MIROLI, 1960), a freshwater limpet new to Belgium (Mollusca, Gastropoda, Aculyidae)

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Abstract

Ferrissia wautieri (MIROLI, 1960) has been recorded up to now from 4 localities in Belgium. Two records date from 1937, which might be the first ones in Europe. A brief description of the shell and a key to the freshwater limpets found in Belgium, are given.

Résumé

Jusqu'à présent, *Ferrissia wautieri* (MIROLI, 1960) a été trouvé dans quatre localités en Belgique. Deux de ces récoltes datent de 1937, ce qui représenterait les premières données pour l'Europe. Une courte description de la coquille ainsi qu'une clé des Aculyidae de Belgique, sont présentées.

Samenvatting

Ferrissia wautieri (MIROLI, 1960) werd tot nu toe op 4 plaatsen in België gevonden. In twee ervan gebeurde dit in 1937, wat zou betekenen dat dit de eerste vindplaatsen zijn voor Europa. Een korte beschrijving van de schelp en een sleutel voor de Aculyidae van België worden toegevoegd.

Introduction

When examining non-identified samples of freshwater molluscs for our Atlas-project, it turned out that each of two samples collected in quite recent years (1977, 1981), contained one specimen belonging to *Ferrissia wautieri* (MIROLI, 1960). This species has been recently found in several European countries (A. NORRIS, 1982, p. 59; J. WAUTIER, 1977, p. 288).

Therefore we decided to recheck all the identifications of freshwater limpets in the Belgian mollusc collection of the Institute. As a result, we found another two specimens, formerly identified as *Acroloxus lacustris*, from two localities of Antwerp province and collected in 1937.

According to A. NORRIS (1982, p. 59), the first discovery of *Ferrissia wautieri* in Europe dates from 1944, in France. This however has to be corrected in the light of the above information.

Material (fig. 1)

1. Grobbendonk (Antwerp province), Albert Canal, U.T.M. grid FS 27, leg. J. DENAYER, 31.VIII.1937: 1 ex. (2,4 × 1,5 × 0,7 mm), I.G. n° 11.126.
2. Balen (Antwerp province), canal from Dessel to Kwaadmechelen, U.T.M. grid FS 57, leg. O. GOOSSENS, 16.IX.1937: 1 ex. (1,8 × 1,0 × 0,6 mm), probably 2 other animals without a shell also belong to this species, I.G. n° 11.126.
3. Geel (Antwerp province), Nature reserve «De Zegge», ponds along the «Roerdompstraat», U.T.M. grid FS 37, leg. K. WOUTERS, 19.VI.1977, D 79: 1 ex. (1,8 × 1,0 × 0,6 mm), I.G. n° 25.549.
4. Lapscheure, Zevengemeten bij Flettersdam (West-Flanders province) in a drainage canal, U.T.M. grid ES 28, leg. F. FIERS, 1.VI.1981, FF 174: 1 ex. (2,3 × 1,5 × 0,8 mm), I.G. n° 26.304.

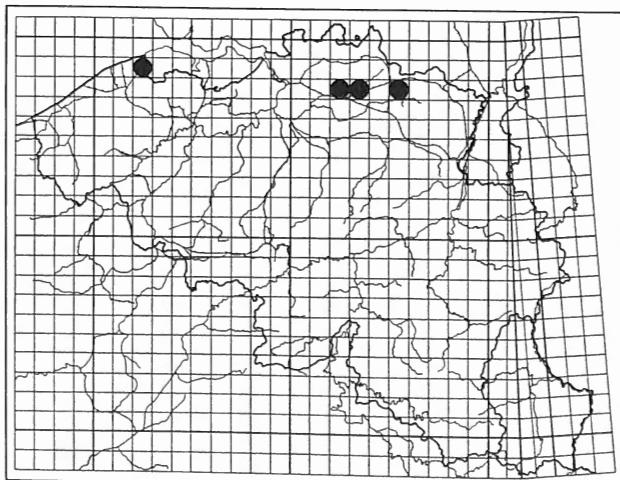


Fig. 1. Distribution of *Ferrissia wautieri* in Belgium.

Description of the shell (figs 2-4)

Perimeter of aperture elliptical to elongate-elliptical. Anterior end of the shell rounded; posterior end somewhat oblique. Posterior tip of the shell located to the left of the median line.

Apex blunt, posterior and slightly directed to the right, with an exceedingly fine radial striation ($20 \times$ magnification required, fig. 4); for excellent illustrations see P.L. REISCHÜTZ, 1983, pl. I; J. WAUTIER, 1977, p. 287; G. VAN DER VELDE & J. ROELOFS, 1977, fig. 1A-C.

Anterior slope of the shell slightly convex dorsally and almost straight anteriorly. Posterior slope concave.

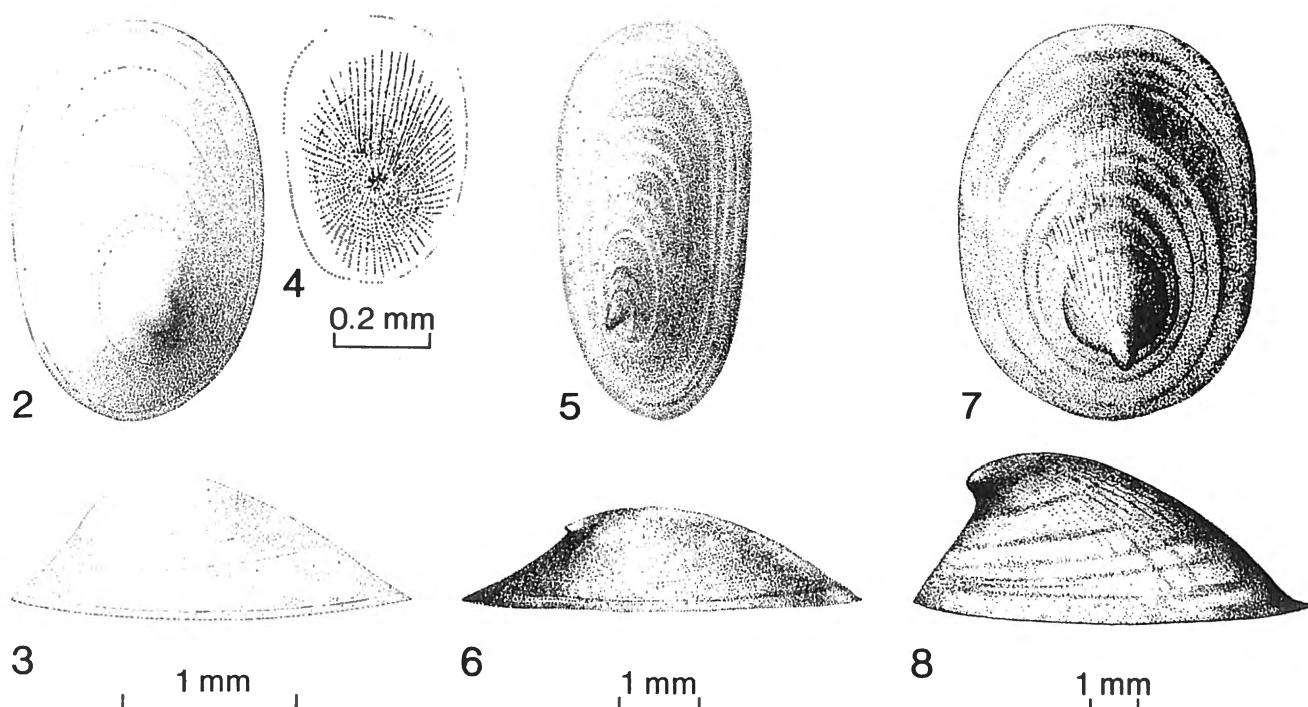
Shell with very fine growth lines; light brown to very pale brownish. Length up to 4 mm.

For a more detailed description, see B. HUBENDICK, 1970, p. 25, figs 93-97; 1972, p. 119, figs 21-25; CASTAGNOLO, L. et al., 1982, p. 267, figs 1A-I, 2A-I, pls 1-4: also the anatomy, the radula and an extensive literature.

Septation is common, see J. WAUTIER et al., 1962, p. 70, figs 1-3, pl. I, figs 1-8; J. WAUTIER, 1977, p. 285, figs 1-3; M. MIROLI, 1960, p. 127.

Key to the freshwater limpets found in Belgium

1. - Septum present *Ferrissia wautieri*.
- No septum
2. - Apex located to the left of the median line, pointed and directed to the left; shell elongate (figs 5-6) *Acroloxus lacustris*.
- Apex located on the median line or to the right of the median line 3
3. - Apex blunt, provided with an exceedingly fine radial striation ($20 \times$ magnification), situated to the right of the median line; general shell form more or less elongate with the posterior end somewhat oblique (figs 2-4) *Ferrissia wautieri*.
- Apex bluntly pointed, located on the median line or slightly to the right; general shell form almost regularly elliptical (figs 7-8) *Ancylus fluviatilis*.



Figs 2-3. *Ferrissia wautieri* (MIROLI), *Lapscheure*, length 2,3 mm.

Fig. 4. *Ferrissia wautieri* (MIROLI), *Balen*, length 1,8 mm, apical region.

Figs 5-6. *Acroloxus lacustris* (LINNAEUS), *Willebroek canal*, length 4,9 mm.

Figs 7-8. *Ancylus fluviatilis* (MÜLLER), *Namur*, length 8,5 mm.

Discussion

Two samples collected by J. DENAYER & O. GOOSSENS in 1937 prove that *Ferrissia wautieri* cannot be considered as a recent introduction to Belgium. We feel that its existence in our country has been overlooked for a long time. If however, it turns out that *F. wautieri* is not endigenous in western Europe, its introduction in Belgium precedes the records in France in 1944 (P. CALAS, 1946, p. 404; A. NORRIS, 1982, p. 59).

Probably the species is more widely spread in Belgian waters. It is hoped that this paper will stimulate further collecting and findings. Ecological data have to be gathered as well.

Acknowledgments

Drawings of *F. wautieri* were made by H. VAN PAESSCHEN and the first author. Drawings of *A. lacustris* and *A. fluviatilis* were taken from W. ADAM, 1960.

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